STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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January 15, 2003

Mr. Roy Schepens, Manager
Office of River Protection
P. 0. Box 550
Richland, Washington 99352

Dear Mr. Schepens:

Re: Technetium Removal in the Hanford Tank Waste Treatment Plant (WTP)

This past year marked a major step forward in the management of Hanford tank wastes as the efforts of Congress, the United States Department of Energy Office of River Protection (USDOE-ORP), Hanford site contractors, and the State of Washington culminated in start of construction of Hanford's Waste Treatment Plant (WTP).

However, Ecology has recently become alarmed about USDOE-ORP's proposal to eliminate the technetium (Tc-99) removal technology from the pretreatment portion of the WTP. I strongly urge you to act now to assure that construction of a fully capable treatment complex stay on track and that USDOE-ORP's work directives and authorizations are consistent with getting the most out of WTP. USDOE-ORP recently made the decision to build only two low-activity waste melters, citing it's preference for supplemental technologies. Ecology is resolute in its requirement that any supplemental technology must meet the performance standards of glass. Without Tc-99 removal, and only two low-activity melters, finding an acceptable, low-cost supplemental technology that is capable of meeting the required standards is nearly impossible.

A more detailed description of Ecology's additional concerns follows:

1.) Lack of Tc-99 removal brings up questions and concerns about Nuclear Waste Policy Act (NWPA) compliance.

The original Waste Incidental to Reprocessing (WIR) ruling made by Nuclear Regulatory Commission for Immobilized Low Activity Waste (ILAW) disposal at Hanford assumed pretreatment including Tc-99 removal and vitrification of the waste form. How is USDOE planning on complying with NWPA as it relates to removal of key radionuclides? Will USDOE seek a WIR determination or modification prior to the decision to eliminate Tc-99 removal from WTP?

2.) Elimination of Tc-99 removal capabilities is contrary to current National Environmental Policy Act (NEPA) coverage.

The current Tank Waste Remediation System Environmental Impact Statement (TWRS-EIS) which provides National Environmental Policy Act (NEPA) and State Environmental Policy Act (SEPA) review for the on-going activities associated with tank waste, assumed Tc-99 removal. Any change in this decision cannot be made until an EIS has examined the issue, public comment received, and a record of decision registered. How and when are you planning to address this issue?

3.) Moving Points of Compliance or Times of Compliance is not acceptable.
Moving points of compliance or a reduction to the time of compliance, so that peak concentrations into the ground water are not considered, is inappropriate. Risk-based cleanup approaches do not focus on how to recalculate the risk to meet a predetermined end. Additionally, risk-based approaches should not be applied to newly treated and disposed of waste - these are methods used for soil and groundwater waste site remediation, where options are considerably more limited.

4.) Cost savings related to the analysis of eliminating Tc-99 removal are incomplete.

Even though potential savings to the WTP project by the elimination of Tc-99 removal have been calculated, the cost impacts to creating a more robust supplemental waste form or to designing and constructing a more robust disposal system have not. USDOE's own Top-to-Bottom review requires that life-cycle costs be reviewed in making such decisions. We have not been privy to any information showing this thorough cost analysis.

Further, Ecology has grave concerns with what appears to be a trend to minimize the capabilities of the WTP as it relates to pretreatment and low-activity waste vitrification throughput. In addition, eliminating Tc-99 removal capabilities combined with supplemental waste forms will result in an increased risk burden to the Central Plateau groundwater. These last minute changes to the WTP design and elimination of needed components endanger the viability of the facility. It also reduces the over all effectiveness and flexibility of what is likely to be the "one and only" treatment complex for Hanford's tank waste.

I would like to meet with you as soon as your schedules allows on these timely issues. Please contact Suzanne Dahl immediately to schedule a staff briefing in addition. Your prompt attention and response to this matter is appreciated.

Sincerely,

Michael A. Wilson, Program Manager
Department of Ecology

cc: Dave Bartus, EPA
Nick Ceto, EPA
Cathy Massimino, EPA
James E. Rasmussen, ORP
Bill Taylor, ORP
Fred Beraneck, WGI
Lori Huffman, ORP
Russell Jim, YIN
Todd Martin, HAB
Ron Naventi, BNI
Ken Niles, ODOE
Donna Powaukee, NPT
J. Wilkinson, CTUIR
Administrative Record: Tank Waste Treatment Requirements